	ED STATES PATENT A	AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.uspto.gov	OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,004	09/28/2001	Arnold Jeffery Daks	AUS9-2001-0767-US1	4835
7590 04/08/2005			EXAMINER	
Leslie A. Van Leeuwen International Business Machines Corporation Intellectual Property Law Dept., Internal Zip 4054 11400 Burnet Road Austin, TX 78758			ROMANO, JOHN J	
			ART UNIT	PAPER NUMBER
			2192	
			DATE MAILED: 04/08/2005	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	09/966,004	DAKS ET AL.				
Office Action Summary	Examiner	Art Unit				
	John J Romano	2192				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
<ul> <li>A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION</li> <li>Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a re</li> <li>If NO period for reply is specified above, the maximum statutory perio</li> <li>Failure to reply within the set or extended period for reply will, by statt Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	I. 1.136(a). In no event, however, may a reeply within the statutory minimum of thirty of will apply and will expire SIX (6) MONT ute, cause the application to become ABA	eply be timely filed ( (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>9/2</u>	<u>28/01, 1/14/02</u> .					
2a) This action is <b>FINAL</b> . 2b)⊠ Th	nis action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-30</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-30</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>14 January 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> </ul>						
2. Certified copies of the priority documents have been received in Application No.						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) X Notice of References Cited (PTO-892)		ummary (PTO-413)				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0</li> </ul>		)/Mail Date formal Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) 🗌 Other:					

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### DETAILED ACTION

Claims 1-30 are pending in this action.

## Claim Rejections - 35 USC § 102

### 1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-5**, **8-12**, **15-19**, **22**, **25** and **28** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Song et al., US 5,949,999 (hereinafter **Song**).

3. In regard to claim **1**, **Song** discloses:

- "A computer controlled display system for tracking the development of complex software products having a plurality of developmental lines..."
   (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed.
- "...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..." (E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in

Figure 3. Furthermore, the checkpoints are illustrated in a sequence from left to right as illustrated in Figure 2.

"…means for tracking each of said developmental lines to determine the reached checkpoints; and means for displaying said plurality of developmental lines and indicating said reached checkpoints." (E.g., see Figure 3 & Column 4, lines 56-65), wherein the means is for tracking the development of software components in a project, wherein a progress status panel is illustrated, which illustrates via the interface (display) reached attributes of checkpoints with by marking the activities (checkpoints) that are completed.

4. In regard to claim **2**, the rejections of base claim **1** are incorporated.

Furthermore, Song discloses:

"...means for modifying said developmental lines and said checkpoints..." (E.g., see Figure 2 & Column 3, lines 58-62), wherein the set of required documents and procedures (checkpoints) will change (modify) depending on the software component they are associated with.

"...and means for displaying said modifications." (E.g., see Figure 3 & Column 4, lines 58-63), wherein a marked activity shows that the document is available and hidden activities are those omitted. Others are yet to be developed.

5. In regard to claim **3**, the rejections of base claim **2** are incorporated.

Furthermore, Song discloses:

 "...means for displaying at each of said checkpoints, a set of developmental attributes for said checkpoint." (E.g., see Figure 3 & Column 4, lines 50-55), wherein the activities are the attributes of the checkpoint.

6. In regard to claim 4, the rejections of base claim 3 are incorporated.

Furthermore, Song discloses:

"...means for modifying said developmental attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see Figure 3 & Column 3, lines 57-65), wherein the documents (attributes) are changed (modifying) according to the requirements of the project execution and displayed accordingly as illustrated.

7. In regard to claim **5**, the rejections of base claim **3** are incorporated.

Furthermore, Song discloses:

- "...said developmental attributes include actions performed in said software product development." (E.g., see Figure 3 & Column 4, lines 21-22), wherein the activities (actions) are selected.
- 8. In regard to claim **22**, **Song** discloses:
  - "A computer controlled display system for tracking the building of a
     program product from a functional implementation stage to a complete

*integrated program product…*" (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed. Furthermore, Figure 3 illustrates the status of Implementation and Integration phases.

- "...a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product..." (E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in Figure 3, and the system components integrated together would be the software system (complete product).
- "...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..." (E.g., see Figure 2 & Column 4, lines 28-35), wherein activities are selected and displayed accordingly.
- "...means for tracking each of said developmental lines to determine the reached checkpoints; and means for displaying said plurality of developmental lines and indicating said reached checkpoints." (E.g., see Figure 3 & Column 4, lines 56-65), wherein the means is for tracking the development of software components in a project, wherein a progress status panel is illustrated, which illustrates via the interface

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(display) reached checkpoints with by marking the procedures (checkpoints) that are completed.

 As per claims 8-12 and 25, this is a method version of the claimed system
 discussed above, in claims 1-5 and 22, wherein all claimed limitations have also been
 addressed and/or cited as set forth above. For example, see Song (Column 7, lines 31-33), wherein a method of the above system is disclosed.

10. As per claims **15-19** and **28**, this is a computer program version of the claimed system discussed above, in claims **1-5** and **22**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

# Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 6, 13, 20, 23, 24, 26, 27, 29 and 30 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Song in view of obviousness.

13. In regard to claim **6**, the rejections of base claim **5** are incorporated.

Furthermore, Song discloses:

"...means for modifying said actions." (E.g., see Figure 3 & Column 3, lines 57-65), wherein procedures and documents will change (modify) depending on the software component they are associated with. For example, activity (actions) Hazard Analysis may not need to be carried out on a non-safety-critical software component.

But **Song** does not expressly disclose "switch said actions to other of said developmental lines". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to switch the action to other of said developmental lines. The motivation to do so was suggested by **Song** "This variant of the organization's development procedure can be easily represented by the mechanism and changes depending on the selected system component." (E.g., Column 3, lines 63-65) Furthermore, **Song** discloses, "activity Hazard Analysis may not need to be carried out on a non-safety-critical software component" (E.g., Column 3, lines 60-62). Thus, it may be carried out on a safety-critical software component on a different developmental line. Thus, to remove a particular action from one developmental line and implement the same action in another is interpreted as switching. Therefore, it would have been obvious to switch said actions to other of said developmental lines.

14. In regard to claim 23, the rejections of base claim 22 are incorporated.Furthermore, Song discloses:

"...further including means for displaying at each of said checkpoints, a set of attributes for said checkpoint." (E.g., see Figure 3 & Column 4, lines 50-55), wherein the activities are the attributes of the checkpoint.

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But **Song** does not expressly disclose "*related to the compatibility functions of said checkpoint line*". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include attributes that are related to the compatibility functions of said checkpoint line. The motivation to do so was suggested by (E.g. see, Figure 3 & Column 1, lines 37-45), wherein Song discloses "*the present invention is a mechanism that integrates software engineering and system components to guide the browsing/tracking of software development documents (e.g., ...testing) ....this capability is useful...for developing and validating safety-critical software systems*". It would have been obvious, to one of ordinary skill, at the time the invention was made, to include compatibility functions in the testing. Furthermore, **Song** discloses, "testing" in Figure 3. Therefore, it would have been obvious to include attributes "*related to the compatibility functions of said checkpoint line*.

15. In regard to claim 24, the rejections of base claim 22 are incorporated.Furthermore, Song discloses:

"...means for modifying said attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see Figure 3 & Column 3, lines 57-65), wherein the documents (attributes) are changed (modifying) according to the requirements of the project execution and displayed accordingly as illustrated.

16. As per claims **13**, **26** and **27**, this is a method version of the claimed system discussed above, in claims **6**and **23**, wherein all claimed limitations have also been

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addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

17. As per claims **20**, **29** and **30**, this is a computer program version of the claimed system discussed above, in claims **6** and **23**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

18. Claims **7**, **14** and **21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Song** in view of Hopwood et al., US 6,223,343 B1 (hereinafter **Hopwood**).

19. In regard to claim 7, the rejections of base claim 2 are incorporated.

Furthermore, Song discloses:

"...means for storing, in association with said means for displaying, the data tracked by said means for tracking; and means for communicating the data tracked to said means for storing." (E.g., see Figure 4 (element 16) & Column 5, lines 38-42), wherein the document repository (store) stores the data tracked in association with displaying, wherein the data inherently is communicated to the document repository.

But **Song** does not expressly disclose, "*said means for tracking are remote from said means for displaying*". However, **Hopwood** discloses:

"...said means for tracking are remote from said means for displaying..." (E.g., see Figure 6 & Column 15, lines 22-31), wherein the RMS (means for tracking) is remote from the means for displaying.

**Song** and **Hopwood** are analogous art because they are both concerned with the same field of endeavor, namely, managing/tracking the development of a software product. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Hopwoods'** remote means for tracking with **Songs'** software tracking system. The motivation was disclosed by **Song**, by developing a tracking mechanism "for any organization that produces safety-critical software system". Therefore, it would be obvious, to one of ordinary skill in the art, to access the system remotely as many organizations have developers and managers in remote locations. Thus it would have been obvious to combine **Hopwoods'** remote means for tracking with **Songs'** software tracking system.

20. As per claim **14**, this is a method version of the claimed system discussed above, in claim **7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

21. As per claim **21**, this is a computer program version of the claimed system discussed above, in claim **7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

#### Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shei et al., US 5,703,788

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 group receptions: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TUAN DAM SUPERVISORY PATENT EXAMINER

JJR